# INDEX


ABELL, R. G. The permeability of blood capillary sprouts and newly formed blood capillaries as compared to that of older blood capillaries, 237.

Abdominal chemoreceptors, 654.

Acetylcholine, action of, thiamine and, on muscle, 233.

—— synthesis, substances that decrease, 384.

Acid-base balance of blood in asphyxia, 433.

—— —— ——, renal regulation of, 138.

——, titratable, excretion of, 481.

Acoustic cortex, pathway from medial geniculate to, 311.

Activity and experimentally produced obesity, 708.

ADLER, H. F. See GRODINS, LEIN and ADLER, 433.

Adrenalectomy, urinary non-protein nitrogen after, 222.

ALLEN, R. P. See GILMAN, PHILIPS, KOELLE, ALLEN and ST. JOHN, 115.

ALLEN, W. F. Effect of bilateral destruction of three lateral cerebral cortical areas on correct conditioned differential responses from general cutaneous stimulation, 454.

Alveolar air, $O_2$ pressure gradient from, to arterial blood, 199.

—— $CO_2$ and decompression sickness, 603.

—— gas pressures, indirect method for calculating, 191.

Amino nitrogen of tissues during shock, 175.

Amplifier, different direct current, 682.

Anaerobic glycolysis of rat liver in vitro, 509.

ANDERSON, E. See PAGE, OGDEN and ANDERSON, 471.

Anemia, hyperchromic, 404.

Anesthesia, pentothal, effect of, on cerebral cortex, 343.

——, urine secretion in, anoxic anoxia and, 616.

Anoxia, resistance of liver respiration to, 181.

Anoxic anoxia and urine secretion in anesthesia, 616.

Arterial oxygen pressure while breathing oxygen, 54.

—— pressure, effective, renal blood flow and, 537.

Ascorbic acid, effect of, on hemorrhagic shock, 598.

Asphyxia, blood acid-base balance in, 433.

Asphyxial depolarisation in spinal cord, 669.

BAKER, B. L. and J. H. LEEK. The relationship of the parathyroid glands to the action of estrogen on bone, 522.

Barometric pressures, low, $CO_2$ production at, 217.

BEHNKE, A. R. See PACE, CONSOLAZIO, WHITE and BEHNKE, 352.

BERG, W. E. and S. F. COOK. Carbon dioxide production of humans at sea level and at low barometric pressures, 217.

BERNHEIM, F. and M. L. C. BERNHEIM. The effect of methyl xanthines on the formation of urea in rabbits, 428.

BERNHEIM, M. L. C. See BERNHEIM and BERNHEIM, 428.

BERRYMAN, G. H. See COGSWELL, BERRYMAN, HENDERSON, DENKO and SPINELLA, 39.

Biological effect of high frequency radio waves, 281.

BLAIR, J. R. See KELLER and BLAIR, 500.

Blood acid-base balance in asphyxia, 433.

——, arterial, $O_2$ pressure gradient from alveolar air to, 199.

—— capillaries, newly formed, permeability of, 237.

—— cells, determination of total volume of, 412.

—— changes in tourniquet shock, 66.

—— flow and resistance in hemorrhagic shock, 685.

—— —— in man, cerebral metabolism and, 517.

—— ——, renal, and effective arterial pressure, 537.

——, influence of caloric restriction on, 423.

—— loss, movements of body water in response to, 306.

—— pressure and flow distal to constricting cuff, 260.

—— ——. *See* Hypertension.

——, reduction time of, after breath-holding, 636.

——, —— —— ——, in skin capillaries, 622, 630.

—— sugar level, effect of necrosin on, 379.

Blood transfusion in hemorrhagic shock in rats, 155.
Body water, movements of, in response to blood loss, 306.
Bogart, R. and D. T. Mayer. The relation of temperature and the thyroid to mammalian reproductive physiology, 320.
Bone, action of estrogen on, parathyroid glands and, 522.
Bradley, C. E. See Wilkins and Bradley, 260.
Brain, electrical rhythm of, after DDT administration, 127.
——, -heat regulating fibers in pons, 500.
Breath-holding, reduction time of blood after, 636.
Brooks, C. McC. A study of the respiratory quotient in experimental hypothalamic obesity, 727.
——. The relative importance of changes in activity in the development of experimentally produced obesity in the rat, 708.
— and E. F. Lambert. A study of the effect of limitation of food intake and the method of feeding on the rate of weight gain during hypothalamic obesity in the albino rat, 695.
——, R. A. Lockwood and M. L. Wiggins. A study of the effect of hypothalamic lesions on the eating habits of the albino rat, 735.
——, D. N. Marine and E. F. Lambert. A study of the food-feces ratios and of the oxygen consumption of albino rats during various phases of experimentally produced obesity, 717.

Caloric restriction, influence of, on blood, 423.
Campbell, H. L. Sodium chloride as an adjunct to a diet of whole wheat and whole milk, 340.
Campbell, J. The effects of insulin on the increase in liver fat produced by anterior pituitary extracts, 742.
Capillaries, blood, newly formed, permeability of, 237.
——, skin, reduction time of blood in, 622, 630.
Carbohydrate feeding, high, fasting and tolerance to, 228.
Carbon dioxide, alveolar, and decompression sickness, 603.
—— —— production at low barometric pressures, 217.
—— monoxide, rate of uptake of, by man, 352.
Cardiac oxygen use and efficiency in heart failure, 28.
——. *See* Heart.
Cardiodynamic factors in hemorrhagic shock, 270.
Cardiovascular responses to explosive decompression, 289.
Cerebral cortex, effect of pentothal anesthesia on, 343.
—— lesions and conditioned reflexes, 454.
—— metabolism and blood flow in man, 517.
Chemoreceptors, abdominal, 654.
Chiodi, H. See Fasciolo and Chiodi, 54.
Circulation in limbs, effects on, by constricting cuff, 260.
Circulatory and respiratory reflexes during tipping, 661.
Cogswell, R. C., G. H. Berryman, C. R. Henderson, C. W. Denko and J. R. Spinella. Absence of rapid deterioration in moderately active young men on a restricted intake of B-complex vitamins and animal protein, 39.
Conklin, R. E. Circulatory and respiratory reflexes in the rabbit during tipping, 661.
Consolazio, W. V. See Pace, Consolazio, White and Behnke, 352.
Cook, S. F. See Berg and Cook, 217.
Cowie, D. B. See Wilde, Cowie and Flexner, 360.
Crescitelli, F. and A. Gilman. Electrical manifestations of the cerebellum and cerebral cortex following DDT administration in cats and monkeys, 127.
Curare effect, apparent, of substances that decrease acetylcholine synthesis, 384.

Danowski, T. S., J. R. Elkinton and A. W. Winkler. Movements of body water in response to acute blood loss, 306.
Davis, J. E. Hyperchromic anemia produced by choline or acethycholine and the induced remission of both by folic acid or liver injection. The probable

mechanism of action of liver and folic acid in treatment of anemia, 404.
DDT administration, electrical rhythm of brain after, 127.
DeBoer, B. The distribution of water and fat in the skin and muscle of the dog during chronic and acute dehydration, 49.
——. Water and salt exchange during chronic and acute dehydration in the dog, 399.
Decompression, explosive, cardiovascular responses to, 289.
——, intravascular gas bubble formation in, 19.
—— sickness, alveolar carbon dioxide and, 603.
Dehydration and water distribution, 49.
——, water-salt exchange in, 399.
Denko, C. W. See Cogswell, Berryman, Henderson, Denko and Spinella, 39.
de Pasqualini, C. D. Standardized hemorrhagic shock in the guinea pig, 591.
——. The effect of ascorbic acid on hemorrhagic shock in the guinea pig, 598.
Desensitization of mice to placental toxin, 250.
Deuel, H. J., Jr. See Miller, Friedman and Deuel, 423.
Diet, whole wheat and milk, NaCl as adjunct to, 340.
Dietary restrictions in man and efficiency, 39.
Dinitrophenol, action of, on oxygen consumption, 527.
Dow, P., P. F. Hahn and W. F. Hamilton. The simultaneous transport of T-1824 and radioactive red cells through the heart and lungs, 493.
Dragstedt, L. R. See Eilert and Dragstedt, 346.

EAR,—pathway from medial geniculate body to acoustic cortex, 311.
Eating habits, effect of hypothalamic lesions on, 735.
Ebaugh, F. G., Jr. See Warren and Ebaugh, 509.
Eckstein, R. W., I. M. Liebow and C. J. Wiggers. Limb blood flow and vascular resistance changes in dogs during hemorrhagic hypotension and shock, 685.
Edelmann, A. See Whitehorn, Lein and Edelmann, 289.
Eilert, M. L. and L. R. Dragstedt. Lipotropic action of lipocaic: A study of the effect of oral and parenteral lipocaic and oral inositol on the dietary fatty liver of the white rat, 346.
Elbel, E. R. and R. R. Ronkin. Palmar skin resistance as a measure of physical fitness, 1.
Electrocardiogram of rats on vitamin E deficiency, 477.
Electro-potential, gastric secretory, origin of, 69.
Elkinton, J. R. See Danowski, Elkinton and Winkler, 306.
Embryo, metabolism of histamine in, 462.
Engel, F. L. and M. G. Engel. Urea synthesis from amino acids during hemorrhagic shock in the nephrectomized rat, 165.
Engel, G. L. See Ferris, Engel, Stevens and Logan, 517.
Engel, M. G. See Engel and Engel, 165.
—— See Wilhelmi, Engel and Long, 181.
Ensor, C. R. The electrocardiogram of rats on vitamin E deficiency, 477.
Erlanger, J. and G. M. Schoepfle. A study of nerve degeneration and regeneration, 550.
Ershoff, B. H. Studies on the nutritive value of lactose and galactose with the single-food choice method, 13.
Estrogen, action of, on bone, parathyroid glands and, 522.
Estrogens, synthetic, potency of, 582.
Etsten, B. See Homburger, Himwich, Etsten, York, Maresca and Himwich, 343.
Excretion of titratable acid, 481.

FASCIOLO, J. C. and H. Chiodi. Arterial oxygen pressure during pure $O_2$ breathing, 54.
Fasting and tolerance to high carbohydrate feeding, 228.
Fat, liver, produced by anterior pituitary extract, effect of insulin on, 742.
Feces ratios, food-, and oxygen consumption in obesity, 717.
Ferris, E. B., G. L. Engel, C. D. Stevens and M. Logan. The validity of internal jugular venous blood in studies of

cerebral metabolism and blood flow in man, 517.
Fetal growth, placental permeability and, 360.
FLEXNER, L. B. See WILDE, COWIE and FLEXNER, 360.
Flow of dye and cells through heart and lungs, 493.
Folic acid in treatment of hyperchromic anemia, 404.
FOLLIS, R. H., JR. Studies on the biological effect of high frequency radio waves (radar), 281.
Food-feces ratios and oxygen consumption in obesity, 717.
FRANKE, R. E. See LILIENTHAL, RILEY, PROEMMEL and FRANKE, 199.
——. See RILEY, LILIENTHAL, PROEMMEL and FRANKE, 191.
FRIEDMAN, M. See MILLER, FRIEDMAN and DEUEL, 423.
FUHRMAN, G. J., E. D. MCLIN and M. L. TURNER. The effect of time of day on the metabolic rate of albino mice: A manometric method, 284.
—— and F. W. WEYMOUTH. The effect of dinitrophenol on the oxygen consumption of albino mice at graded levels of environmental temperature, 527.

GALACTOSE, lactose and, nutritive value of, 13.
Gas bubble formation, intravascular, in decompression, 19.
—— pressures, alveolar, indirect method for calculating, 191.
Gastric secretory electro-potential, origin of, 69.
GERARD, R. W. See PATT, TOBIAS, SWIFT, POSTEL and GERARD, 329.
GERKING, S. D. and S. ROBINSON. Decline in the rates of sweating of men working in severe heat, 370.
GILMAN, A., F. S. PHILIPS, E. S. KOELLE, R. P. ALLEN and E. ST. JOHN. The metabolic reduction and nephrotoxic action of tetrathionate in relation to a possible interaction with sulfhydryl compounds, 115.
——. See CRESCITELLI and GILMAN, 127.
Glycolysis, anaerobic, of rat liver in vitro, 509.
GOLDMAN, A. See MEYER, MCSHAN, GOLDMAN and SHIPLEY, 66.
GRODINS, F. S., A. LEIN and H. F. ADLER. Changes in blood acid-base balance during asphyxia and resuscitation, 433.
GROLLMAN, A. Experimental hypertension in the dog, 647.

HAHN, P. F. See DOW, HAHN and HAMILTON, 493.
HAMILTON, W. F. See DOW, HAHN and HAMILTON, 493.
HAWES, R. C. A differential direct current amplifier, 682.
HAY, E. C. and P. SEGUIN. The assay of nephrosclerosis producing anterior pituitary preparations, 299.
Heart and lungs, flow of dye and cells through, 493.
—— failure, cardiac oxygen use and efficiency in, 28.
——. *See* Cardiac.
Heat regulating fibers in pons, 500.
——, severe, sweating at work in, 370.
Hemodynamics in pulmonary irritant poisoning, 329.
Hemorrhage, effects of, on tissue metabolites, 446.
Hemorrhagic shock, blood flow and resistance during, 685.
—— ——, effect of ascorbic acid on, 598.
—— —— in guinea pig, 591.
—— —— in rat, standardization of, 155.
—— ——, urea synthesis during, 165.
—— ——, ventricular activity during, 270.
HENDERSON, C. R. See COGSWELL, BERRYMAN, HENDERSON, DENKO and SPINELLA, 39.
HIMWICH, H. E. See HOMBURGER, HIMWICH, ETSTEN, YORK, MARESCA and HIMWICH, 343.
HIMWICH, W. A. See HOMBURGER, HIMWICH, ETSTEN, YORK, MARESCA and HIMWICH, 343.
Histamine, metabolism of, in the embryo, 462.
HODES, R. and M. G. LARRABEE. The relation between alveolar carbon dioxide tension and susceptibility to decompression sickness, 603.
HOLLINSHEAD, W. H. The function of the abdominal chemoreceptors of the rat and mouse, 654.
HOMBURGER, E., W. A. HIMWICH, B. ETSTEN, G. YORK, R. MARESCA and H. E.

Himwich. Effect of pentothal anesthesia on canine cerebral cortex, 343.
Hyperchromic anemia, folic acid and liver injection in, 404.
Hypertension, experimental, in the dog, 647.
——, steroids and, after hypophysectomy, 471.
——. *See* Blood Pressure.
Hypophysectomy, steroids and hypertension after, 471.
Hypothalamic lesions, effect of, on eating habits, 735.
—— obesity, respiratory quotient in, 727.
—— ——, weight gain during, 695.
Hypothermia, tolerance of adult chickens to, 531.

INGLE, D. J. and E. A. Oberle. The effect of adrenalectomy in rats on urinary non-protein nitrogen during forced-feeding and during fasting, 222.
Insulin, effect of, on liver fat produced by anterior pituitary extracts, 742.
Intravascular gas bubble formation in decompression, 19.

JOCHIM, K. See Wise, Meyer, Katz, Lendrum and Jochim, 28.
Johnson, J. R. See Ray, Johnson and Ray, 636.
——. See Ray, Ray and Johnson, 630.

KATZ, L. N. See Wise, Meyer, Katz, Lendrum and Jochim, 28.
Keller, A. D. and J. R. Blair. Further observations on the distribution at the level of the pons of descending nerve fibers subserving heat regulating functions, 500.
Kidney. *See* Renal.
Knowlton, G. C. and M. G. Larrabee. A unitary analysis of pulmonary volume receptors, 100.
——. See Larrabee and Knowlton, 90.
Koelle, E. S. See Gilman, Philips, Koelle, Allen and St. John, 115.
Kosin, I. L. See Munro and Kosin, 582.

LACTOSE and galactose, nutritive value of, 13.
Lambert, E. F. See Brooks and Lambert, 695.
——. See Brooks, Marine and Lambert, 717.
Larrabee, M. G. and G. C. Knowlton. Excitation and inhibition of phrenic motoneurones by inflation of the lungs, 90.
——. See Hodes and Larrabee, 603.
——. See Knowlton and Larrabee, 100.
Lawson, H. C., D. B. Rappaport and A. Ramirez. The recovery of injected dye and the yield of blood cells by perfusion of the cardiovascular system in barbitalized dogs, 412.
Leek, J. H. See Baker and Leek, 522.
Lein, A. See Grodins, Lein and Adler, 433.
——. See Whitehorn, Lein and Edelmann, 289.
Lendrum, B. See Wise, Meyer, Katz, Lendrum and Jochim, 28.
LePage, G. A. The effects of hemorrhage on tissue metabolites, 446.
Liebow, I. M. See Eckstein, Liebow and Wiggers, 685.
Lilienthal, J. L., Jr., R. L. Riley, D. D. Proemmel and R. E. Franke. An experimental analysis in man of the oxygen pressure gradient from alveolar air to arterial blood during rest and exercise at sea level and at altitude, 199.
——. See Riley, Lilienthal, Proemmel and Franke, 191.
Lipocaic, lipotropic action of, 346.
Lipotropic action of lipocaic, 346.
Liver fat produced by anterior pituitary extract, effect of insulin on, 742.
—— injection in treatment of hyperchromic anemia, 404.
——, rat, in vitro, anaerobic glycolysis of, 509.
—— respiration, resistance of, to anoxia, 181.
Lockwood, R. A. See Brooks, Lockwood and Wiggins, 735.
Logan, M. See Ferris, Engel, Stevens and Logan, 517.
Long, C. N. H. See Russell and Long, 175.
——. See Sayers, Sayers and Long, 155.
——. See Wilhelmi, Engel and Long, 181.
Lotspeich, W. D. See Pitts and Lotspeich, 138, 481.
Lungs, heart and, flow of dye and cells through, 493.

Lungs, response of phrenic motoneurones to inflation of, 90.
——. *See* Pulmonary.

MARINE, D. N. See BROOKS, MARINE and LAMBERT, 717.
MARESCA, R. See HOMBURGER, HIMWICH ETSTEN, YORK, MARESCA and HIMWICH, 343.
MAYER, D. T. See BOGART and MAYER, 320.
McELROY, W. D. and A. H. WHITELEY. Relation of gas tension and hydrostatic pressure to intravascular bubble formation, 19.
McLIN, E. D. See FUHRMAN, McLIN and TURNER, 284.
McSHAN, W. H. See MEYER, McSHAN, GOLDMAN and SHIPLEY, 66.
MENKIN, V. The effect of necrosin on the blood sugar level, 379.
Metabolic rate, variations of, during day, 284.
Metabolism, cerebral, and blood flow in man, 517.
—— of histamine in the embryo, 462.
Metabolites, tissue, effects of hemorrhage on, 446.
Methyl xanthines and urea formation, 428.
MEYER, J. See WISE, MEYER, KATZ, LENDRUM and JOCHIM, 28.
MEYER, R. K., W. H. McSHAN, A. GOLDMAN and E. G. SHIPLEY. Biochemical changes in the blood of rats after reapplication of limb tourniquets, 66.
MILLER, Z. B., M. FRIEDMAN and H. J. DEUEL, JR. The influence of caloric restriction on plasma protein, hemoglobin and hematocrit values in the rat, 423.
MISRAHY, G. A. The metabolism of histamine and adenylic compounds in the embryo, 462.
Motoneurones, phrenic, response of, to inflation of lungs, 90.
MUNRO, S. S. and I. L. KOSIN. Relative potency of certain synthetic estrogens when administered orally to chicks, 582.
Muscle, thiamine and action of acetylcholine on, 233.

NECROSIN, effect of, on blood sugar level, 379.
Nephrosclerosis by anterior pituitary preparations, 299.
Nephrotoxic action of tetrathionate, 115.
Nerve degeneration and regeneration, 550.
—— fibers, heat regulating, in pons, 500.
——, peripheral, effects of oxygen lack on, 78.
—— responses to changes in lung volume, 100.
Nitrogen, urinary non-protein, after adrenalectomy, 222.
NORTHUP, D. W. See STICKNEY, NORTHUP and VAN LIERE, 616.
Nutritive value of lactose and galactose, 13.

OBERLE, E. A. See INGLE and OBERLE, 222.
Obesity, experimentally produced, activity and, 708.
——, food-feces ratios and oxygen consumption in, 717.
——, hypothalamic, respiratory quotient in, 727.
——, ——, weight gain during, 695.
OGDEN, E. See PAGE, OGDEN and ANDERSON, 471.
OPDYKE D. F. and C. J. WIGGERS. Studies of right and left ventricular activity during hemorrhagic hypotension and shock, 270.
Oxygen consumption and efficiency of heart in heart failure, 28.
—— ——, effect of dinitrophenol on, 527.
—— —— in obesity, food-feces ratios and, 717.
—— lack, effects of, on peripheral nerve, 78.
—— pressure, arterial, while breathing oxygen, 54.
—— —— gradient from alveolar air to arterial blood, 199.

PACE, N., W. V. CONSOLAZIO, W. A. WHITE, JR. and A. R. BEHNKE. Formulation of the principal factors affecting the rate of uptake of carbon monoxide by man, 352.
PAGE, E. W., E. OGDEN and E. ANDERSON. The influence of steroids on the restoration of hypertension in hypophysectomized rats, 471.
Palmar skin resistance as measure of physical fitness, 1.
Parathyroid glands and action of estrogen on bone, 522.
PATT, H. M., J. M. TOBIAS, M. N. SWIFT, S. POSTEL and R. W. GERARD. Hemody-

namics in pulmonary irritant poisoning, 329.
Pentothal anesthesia, effect of, on cerebral cortex, 343.
Permeability of newly formed blood capillaries, 237.
Peritoneal, intra-, and intrarectal pressures, 242.
Philips, F. S. See Gilman, Philips, Koelle, Allen and St. John, 115.
Phrenic motoneurones, response of, to inflation of lungs, 90.
Pitts, R. F. and W. D. Lotspeich. Bicarbonate and the renal regulation of acid base balance, 138.
—— —— ——. Factors governing the rate of excretion of titratable acid in the dog, 481.
Pituitary extract, anterior, insulin, liver fat and, 742.
—— preparations, anterior, nephrosclerosis by, 299.
Placental permeability and fetal growth, 360.
—— toxin, desensitization of mice to, 250.
—— ——, response to, in pregnancy, 255.
Poisoning, pulmonary irritant, hemodynamics in, 329.
Postel, S. See Patt, Tobias, Swift, Postel and Gerard, 329.
Pregnancy, response to placental toxin in, 255.
Pressures, intraperitoneal and intrarectal, 242.
Proemmel, D. D. See Lilienthal, Riley, Proemmel and Franke, 199.
——. See Riley, Lilienthal, Proemmel and Franke, 191.
Protein intake, vitamin and, in man, and efficiency, 39.
Pulmonary irritant poisoning, hemodynamics in, 329.
—— volume receptors, unitary analysis of, 100.
——. *See* Lungs.

RADAR, biological effect of, 281.
Ramirez, A. See Lawson, Rappaport and Ramirez, 412.
Randall, W. C. Sweat gland activity and changing patterns of sweat secretion on the skin surface, 391.
Rappaport, D. B. See Lawson, Rappaport and Ramirez, 412.
Ray, G. B. The measurement of reduction time of blood in the capillaries of the skin, 622.
——, J. R. Johnson and L. H. Ray. The change in reduction time of blood after breath-holding as a criterion of physical fitness, 636.
——, L. H. Ray and J. R. Johnson. Factors influencing reduction time of blood in the capillaries of the skin, 630.
——. See Ray, Johnson and Ray, 636.
——. See Ray, Ray and Johnson, 630.
Rectal, intra-, pressures, intraperitoneal and, 242.
Rehm, W. S. Evidence that the major portion of the gastric potential originates between the submucosa and mucosa, 69.
Reflexes, circulatory and respiratory, during tipping, 661.
——, conditioned, cerebral lesions and, 454.
Renal blood flow and effective arterial pressure, 537.
—— regulation of acid base balance, 138.
——. *See* Kidney.
Reproduction, temperature and the thyroid in, 320.
Respiration of liver, resistance of, to anoxia, 181.
Respiratory reflexes, circulatory and, during tipping, 661.
—— quotient in hypothalamic obesity, 727.
Rhythm, electrical, of brain after DDT administration, 127.
Riley, R. L., J. L. Lilienthal, Jr., D. D. Proemmel and R. E. Franke. On the determination of the physiologically effective pressures of oxygen and carbon dioxide in alveolar air, 191.
——. See Lilienthal, Riley, Proemmel and Franke, 199.
Robinson, S. See Gerking and Robinson, 370.
Ronkin, R. R. See Elbel and Ronkin, 1.
Rushmer, R. F. The nature of intraperitoneal and intrarectal pressures, 242.
Russell, J. A. and C. N. H. Long. Amino nitrogen in liver and muscle of rats in shock after hemorrhage, 175.

SADHU, D. P. The influence of thiamine on the action of acetylcholine on muscle, 233.
St. John, E. See Gilman, Philips, Koelle, Allen and St. John, 115.

Salt exchange, water and, in dehydration, 399.
SAYERS, G. See SAYERS, SAYERS and LONG, 155.
SAYERS, M. A., G. SAYERS and C. N. H. LONG. The standardization of hemorrhagic shock in the rat: Observations on the effects of transfusions of whole blood and some blood substitutes, 155.
SCHNEIDER, C. L. Desensitization of mice to placental toxin, 250.
——. Placental toxin: Inactivation and tolerance during pregnancy, 255.
SCHOEPFLE, G. M. See ERLANGER and SCHOEPFLE, 550.
Secretion, urine, in anesthesia, anoxic anoxia and, 616.
SEGUIN, P. See HAY and SEGUIN, 299.
SELKURT, E. E. The relation of renal blood flow to effective arterial pressure in the intact kidney of the dog, 537.
SHIPLEY, E. G. See MEYER, MCSHAN, GOLDMAN and SHIPLEY, 66.
Shock, amino nitrogen of tissues during, 175.
——, hemorrhagic, blood flow and resistance during, 685.
——, ——, effect of ascorbic acid on, 598.
——, ——, in guinea pig, 591.
——, ——, in rat, standardization of, 155.
——, ——, urea synthesis during, 165.
——, ——, ventricular activity during, 270.
——, tourniquet, blood changes in, 66.
Skin capillaries, reduction time of blood in, 622, 630.
—— resistance, palmar, as measure of physical fitness, 1.
—— surface, changing patterns of sweat secretion on, 391.
Sodium chloride as adjunct to whole wheat and milk diet, 340.
Spinal cord, asphyxial depolarisation in, 669.
SPINELLA, J. R. See COGSWELL, BERRYMAN, HENDERSON, DENKO and SPINELLA, 39.
Steroids and hypertension after hypophysectomy, 471.
STEVENS, C. D. See FERRIS, ENGEL, STEVENS and LOGAN, 517.
STICKNEY, J. C., D. W. NORTHUP and E. J. VAN LIERE. The effect of anoxic anoxia on urine secretion in anesthetized dogs, 616.
STURKIE, P. D. Tolerance of adult chickens to hypothermia, 531.
Sweat gland activity, 391.
Sweating at work in severe heat, 370.
SWIFT, M. N. See PATT, TOBIAS, SWIFT, POSTEL and GERARD, 329.

TEMPERATURE and the thyroid in reproduction, 320.
Tetrathionate, nephrotoxic action of, 115.
Thiamine and action of acetylcholine on muscle, 233.
Thyroid, para-, glands and action of estrogen on bone, 522.
Thyroid, temperature and, in reproduction, 320.
Tissue metabolites, effects of hemorrhage on, 446.
TOBIAS, J. M. See PATT, TOBIAS, SWIFT, POSTEL and GERARD, 329.
TORDA, C. and H. G. WOLFF. Apparent curare effect of substances that decrease acetylcholine synthesis, 384.
Toxin, placental, desensitization of mice to, 250.
——, ——. response to, in pregnancy. 255.
TUNTURI, A. R. A study on the pathway from the medial geniculate body to the acoustic cortex in the dog, 311.
TURNER, M. L. See FUHRMAN, MCLIN and TURNER, 284.

UREA formation, methyl xanthines and, 428.
—— synthesis during hemorrhagic shock, 165.
Urinary non-protein nitrogen after adrenalectomy, 222.
Urine secretion in anesthesia, anoxic anoxia and, 616.

VAN HARREVELD, A. Asphyxial depolarisation in the spinal cord, 669.
VAN LIERE, E. J. See STICKNEY, NORTHUP and VAN LIERE, 616.
Ventricular activity during hemorrhagic shock, 270.
Vitamin and protein intake in man and efficiency, 39.
—— E deficiency, electrocardiogram of rats on, 477.

WARREN, C. O. and F. G. EBAUGH, JR. The effect of various ions on the anaerobic glycolysis of rat liver *in vitro*, 509.

Water distribution, dehydration and, 49.
Water-salt exchange in dehydration, 399.
Weight gain during hypothalamic obesity, 695.
WEYMOUTH, F. W. See FUHRMAN and WEYMOUTH, 527.
WHITE, W. A., JR. See PACE, CONSOLAZIO, WHITE and BEHNKE, 352.
WHITEHORN, W. V., A. LEIN and A. EDELMANN. The general tolerance and cardiovascular responses of animals to explosive decompression, 289.
WHITELEY, A. H. See McELROY and WHITELEY, 19.
WIGGERS, C. J. See ECKSTEIN, LIEBOW and WIGGERS, 685.
——. See OPDYKE and WIGGERS, 270.
WIGGINS, M. L. See BROOKS, LOCKWOOD and WIGGINS, 735.
WILDE, W. S., D. B. COWIE and L. B. FLEXNER. Permeability of the placenta of the guinea pig to inorganic phosphate and its relation to fetal growth, 360.
WILHELMI, A. E., M. G. ENGEL and C. N. H. LONG. The influence of feeding on the effects of hepatic anoxia on the respiration of liver slices in vitro, 181.
WILKINS, R. W. and S. E. BRADLEY. Changes in arterial and venous blood pressure and flow distal to a cuff inflated on the human arm, 260.
WINKLER, A. W. See DANOWSKI, ELKINTON and WINKLER, 306.
WINTER, H. A. The effect of fasting upon the tolerance of normal rats to a high carbohydrate diet administered by stomach tube, 228.
WISE, W., J. MEYER, L. N. KATZ, B. LENDRUM and K. JOCHIM. The oxygen consumption and mechanical efficiency of the heart before and during heart failure, 28.
WOLFF, H. G. See TORDA and WOLFF, 384.
Work in severe heat, sweating at, 370.
WRIGHT, E. B. A comparative study of the effects of oxygen lack on peripheral nerve, 78.

YORK, G. See HOMBURGER, HIMWICH, ETSTEN, YORK, MARESCA and HIMWICH, 343.